Evaluate Vantage

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Upcoming events: Data for Athersys in stroke, Celladon in heart failure, Heron in emesis

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Welcome to your weekly digest of approaching regulatory and clinical readouts. April will be an important month for Athersys and Celladon as both will release key data from mid-stage trials in ischaemic stroke and heart failure, respectively.

Heron Therapeutics, meanwhile, hopes third time will be the charm for Sustol, its drug for chemotherapy-induced nausea and vomiting. Results from the Heron trial against ondansetron will presage a mid-year submission to the FDA, which has turned down Sustol twice before owing to chemistry, manufacturing and control (CMC) deficiencies.

Athersys

Anxious investors have just over two weeks to wait for the outcome of Athersys' closely watched phase II study of MultiStem in acute ischaemic stroke. The lead investigator is scheduled to present efficacy data on the allogeneic stem cell therapy in this most challenging condition at the European Stroke Organisation conference in Glasgow on April 17-19.

Much rides on the outcome. Long-held scepticism about the likelihood of success of any pharmaceutical intervention for ischaemic stroke means that Athersys is going into this classic biotech binary event with an unusually modest valuation – its market cap is just $230m. Indeed, its share price has even returned to levels seen before the announcement of a Japanese partnership for the product with Roche's Chugai Pharmaceuticals unit last month.

That deal provided Chugai with Japanese rights to MultiStem for ischaemic stroke in exchange for more than $200m in milestone payments, including a $10m up-front with $7m tied to the phase II study result. Japan has an unusually favourable regulatory environment for stem cell products, designed to offer early conditional approval. The country also has the right sort of demographics for this particular indication, with a larger proportion of elderly people in its population than any other G20 country.

The study initially tested two cohorts of eight patients, six on MultiStem and two placebo, at two different doses, before selecting the higher one for the efficacy stage in 126 patients. MultiStem is administered 24-48 hours after the ischaemic event and the important data will be on its effect on neurological recovery at 90 days. This will be measured with a global analysis using the modified Rankin Scale, the National Institutes of Health Stroke Scale and the Barthel Index.

Celladon

Celladon shares have been on a roller-coaster as the California group approaches the critical readout of data from the phase II Cupid-2 trial of gene therapy Mydicar, expected by the end of April. The agent uses a viral vector to deliver a gene encoding production of the enzyme SERCA2a to cardiac tissue to improve contraction in heart muscle cells.

Cupid-2 enrolled 250 patients with ischaemic or dilated cardiomyopathy who were randomised to receive Mydicar or placebo. The trial is testing whether the gene therapy can delay hospitalisations related to a heart transplant, implantation of a left-ventricular assist device or patient before death, as well as delay the occurrence of those terminal events. Earlier this week, Celladon reported that the final patient completed a 12-month follow-up visit and thus the data will be unblinded later this month.

Interest was stoked by Mydicar's results in the placebo-controlled Cupid-1 study, which in 2011 revealed an 88% reduction in major cardiovascular events in the 12 months following infusion of the highest dose of Mydicar; this dose is being used in Cupid-2.

Celladon floated on the Nasdaq early last year and has doubled in value. Shares have fallen back by more than one-third since hitting a peak of $27.26 on March 19 – which valued the group at $650m – as the date of the readout has approached.

Heron

Two FDA complete response letters have not discouraged Heron Therapeutics from trying again with Sustol, a subcutaneous version of Roche's Kytril designed to prevent nausea and vomiting for up to five days following moderately and highly emetic chemotherapies.

Kytril and generic formulations of granisetron are typically effective short term. Kyowa Hakko Kirin's Sancuso addressed this by administering the active ingredient through a transdermal patch. Heron has taken a different approach, delivering granisetron through a bioerodible polymer injected subcutaneously.

Formerly known as AP Pharma, Heron is proposing Sustol for delayed-onset nausea and vomiting, or episodes beginning at least 24 hours after chemotherapy treatment and up to five days leter. Today, the California-based group announced it had reached target enrolment in the Magic phase III trial and expects topline results in May.

Magic tests Sustol plus fosaprepitant and dexamethasone against ondansetron plus fosaprepitant and dexamethasone in 1,000 patients. Heron hopes Sustol will show that it can reduce the number of patients who do not vomit or require rescue medications in the one- to five-day window following chemotherapy treatment.

Previous phase III trials showed Sustol to be non-inferior to palonosetron hydrochloride at a 10mg dose in acute and delayed onset nausea and vomiting for moderately emetogenic chemotherapies and in acute onset for highly emetogenic chemotherapies.

Trial	ID
Multistem	NCT01436487
Cupid-2	NCT01643330
Magic	NCT02106494

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